
Reassessing the cultural stratigraphy and the techno-economic context of the Middle Paleolithic assemblages from Vogelherd Cave

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Abstract

Although Vogelherd Cave in the Lone Valley of southwestern Germany is particularly well-known for its rich Upper Paleolithic assemblages and Aurignacian figurative art, the site's four Middle Paleolithic horizons also represent important points of reference for reconstructing Neanderthal behavior in the Swabian Jura. The original excavation under Gustav Riek's direction took place in 1931 prior to the advent of radiometric dating, which greatly limits the chronological resolution of our study. Nonetheless, the deepest archaeological horizon, AH IX, yielded lithic and faunal material including remains of a straight-tusk elephant that documents the use of the cave during the last interglacial. The overlying Middle Paleolithic horizons (AH VIII-VI) produced cold-temperate faunas that correlate with different phases of MIS 5, 4 and 3. The lithic assemblages from AH VIII and VII include small numbers of irregular bifacial artifacts, as well backed unifacial and bifacial knives. The latter tool category is traditionally associated the region's so-called *Keilmessergruppe*. These backed bifacial knives sometimes preserve negatives from resharpening blows. Roughly half of the Middle Paleolithic artifacts were made on variants of local Jurassic cherts, with lesser amounts radiolarite, alpine micro-quartzite, quartz and other raw materials. In addition to the lithic artifacts, bone retouchers are well documented, while the stratigraphic context of other organic artifacts remains uncertain.

The re-excavation of the backdirt from Vogelherd Cave between 2005 and 2012 led to the recovery of additional Middle Paleolithic artifacts that, while lacking optimal stratigraphic control, greatly augmented the small assemblages from the excavation in 1931. The lithics from the re-excavation include a range of previously overlooked diminutive tools including *groszaki*, small *keilmesser* and scrapers, which were typically made on raw materials other than Jurassic chert. These artifacts provide further techno-economic and typological information that help to illuminate the variability of the Swabian Middle Paleolithic, as well as offering new insights into the lifeways of Neanderthals from the region. The results from Vogelherd underline the difficulty of establishing a robust cultural stratigraphic system while also pointing to new patterns of technological behavior. Based on the comparative

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study of assemblages from other early excavations and results from new fieldwork and laboratory research, a regional pattern of diachronic change is coming into better focus. This paper highlights new results from Vogelherd, while assessing the strengths and weaknesses of the region's Middle Paleolithic record with regard to mobility, settlement dynamics and diachronic cultural change.

Keywords: Vogelherd, Middle Paleolithic, lithic technology, settlement dynamics